

California Influenza and Other Respiratory Disease Surveillance for Week 20 (May 13-19, 2012)

Note: This report includes data from many different sources of influenza surveillance, including syndromic surveillance, laboratory surveillance, and mandatory reporting of influenza deaths for cases ages 0-64 years. The information contained in this report should be viewed as a “snapshot” of influenza activity for each surveillance week, and should not be considered as population-based data or representative of all California public health jurisdictions.

In week 20, the geographic distribution of influenza in California remained “local*.”

Influenza Report Highlights

- Outpatient influenza-like illness (ILI) decreased 2.1% in week 20 (0.6%) compared to week 19 (2.7%).
- Of 507 specimens tested during week 20,
 - 35 (6.9%) were positive for influenza; of these
 - 20 (57.1%) were influenza B and
 - 15 (42.9%) were influenza A.
 - 1 (6.7%) was subtyped as 2009 A (H1),
 - 6 (40.0%) were subtyped as seasonal A (H3), and
 - 8 (53.3%) were not subtyped.
- Of the 140 influenza isolates tested during the 2011-12 influenza season, 1 was resistant to neuraminidase inhibitor drugs.
- Of the 103 specimens from California residents that have been strain-typed this season, all but 8 influenza B strains matched the 2011-12 influenza vaccine.
- Three laboratory-confirmed influenza-associated deaths among persons less than 65 years were reported in week 20.
- No suspected or confirmed influenza A (H3N2)v [variant influenza A (H3N2), formerly called swine-origin triple reassortant A (H3N2)] has been detected in California.

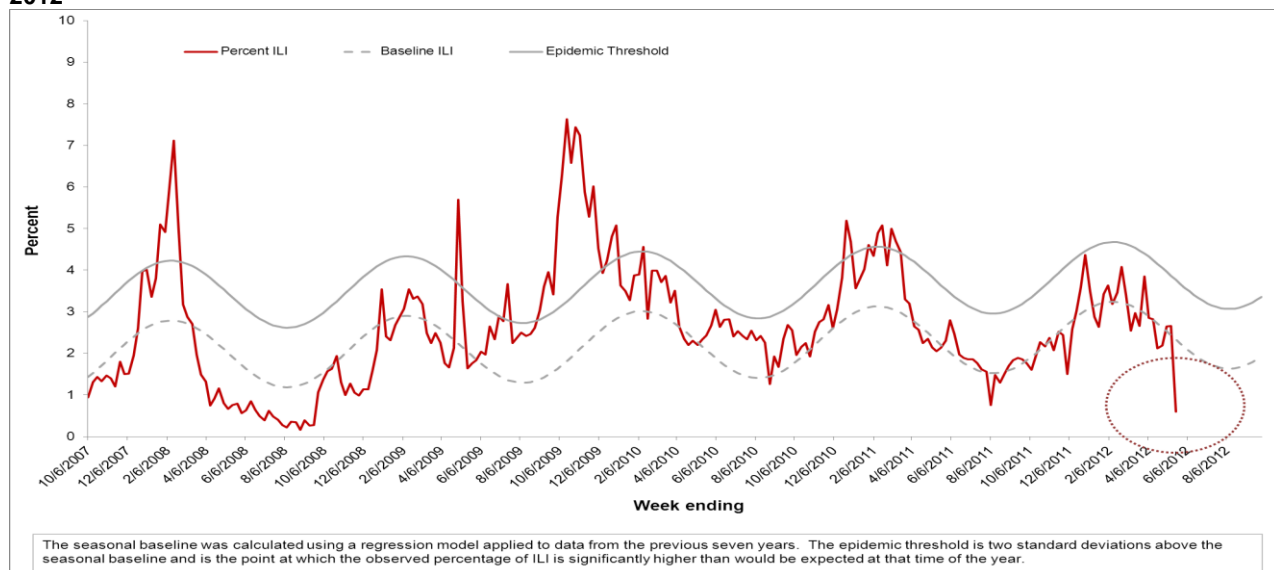
*For the Centers for Disease Control and Prevention (CDC) definitions of influenza geographic distribution, please go to <http://www.cdc.gov/flu/weekly/overview.htm>.

A. Syndromic Surveillance Update

1. CDC Influenza Sentinel Providers

A total of 56 (28.4%) out of 197 enrolled sentinel providers have reported data for week 20. Based on available data, the percentage of ILI visits for week 20 (0.6%) was below baseline (Figure 1).

Figure 1. Percentage of Influenza-like Illness Visits Among Patients Seen by California Sentinel Providers, 2007–2012



2. Kaiser Permanente Hospitalization Data ("Flu Admissions")

The percentage of Kaiser Permanente hospitalizations for pneumonia and influenza in Northern California increased in week 20 (4.7%) compared to week 19 (4.4%).

B. Laboratory Update

1. Respiratory Laboratory Network (RLN) and Sentinel Laboratory Surveillance Results

The percentage of influenza detections in the RLN and sentinel laboratories remained steady in week 20 (6.9%) compared to week 19 (6.8%) (Figure 2). Of 507 specimens tested by the RLN and sentinel laboratories, 20 (3.9%) were positive for influenza B and 15 (3.0%) were positive for influenza A (Figure 3). Of the 15 specimens that tested positive for influenza A, 1 (6.7%) was subtyped as 2009 A (H1), 6 (40.0%) were subtyped as seasonal A (H3), and 8 (53.3%) had no further subtyping performed. The influenza-positive specimens were reported statewide.

To date for the 2011-2012 season, of 50,572 specimens tested, 7391 (14.6%) were positive for influenza; of these, 1256 (17.0%) were influenza B and 6135 (83.0%) were influenza A. Of the 6135 specimens that tested positive for influenza A, 610 (9.9%) were subtyped as 2009 A (H1), 1547 (25.2%) were subtyped as seasonal A (H3), and 3978 (64.8%) had no further subtyping performed.

Neither the RLN nor the California Department of Public Health Viral and Rickettsial Disease Laboratory (CDPH-VRDL) have identified any influenza viruses by polymerase chain reaction (PCR) typing or subtyping that are suggestive of the influenza A (H3N2)v infection.

Figure 2. Percentage of Influenza Detections in Respiratory Laboratory Network and Sentinel Laboratories, 2007–2012

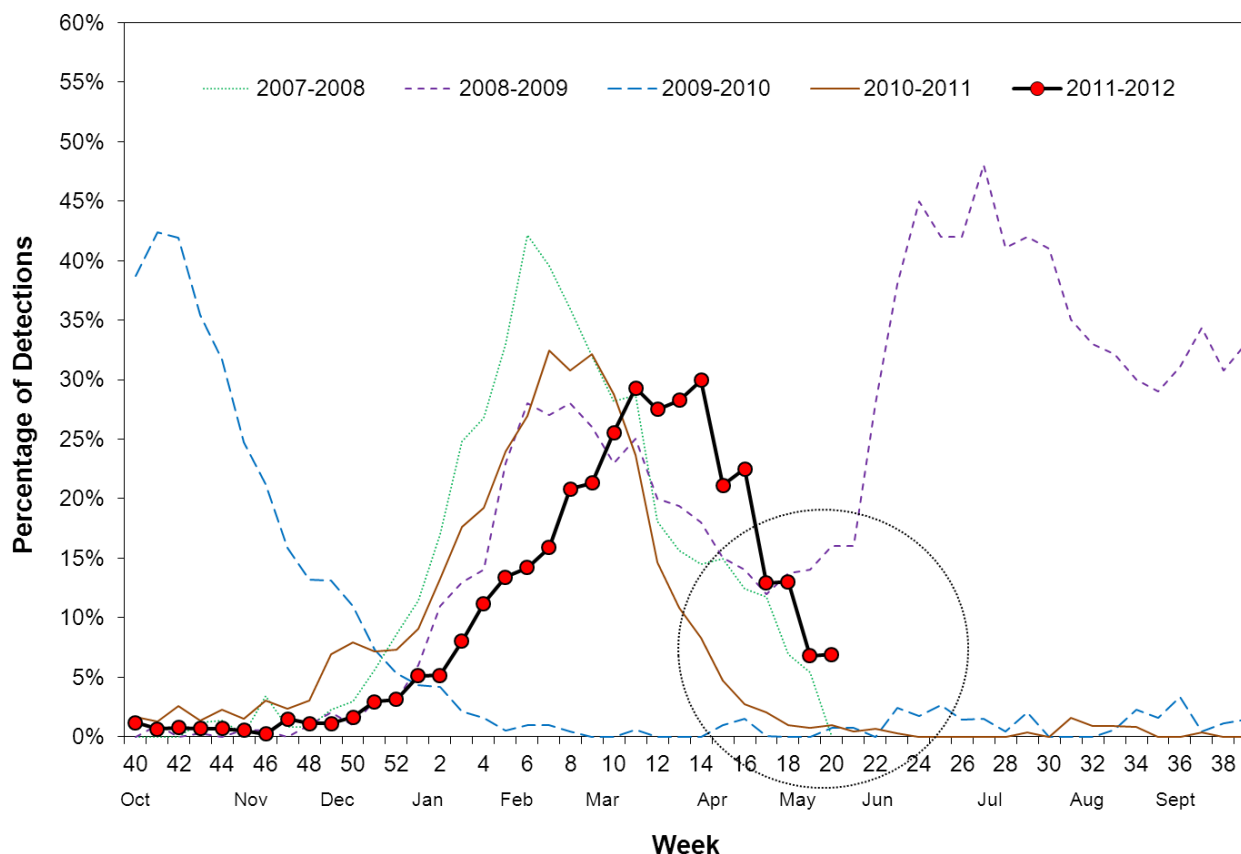
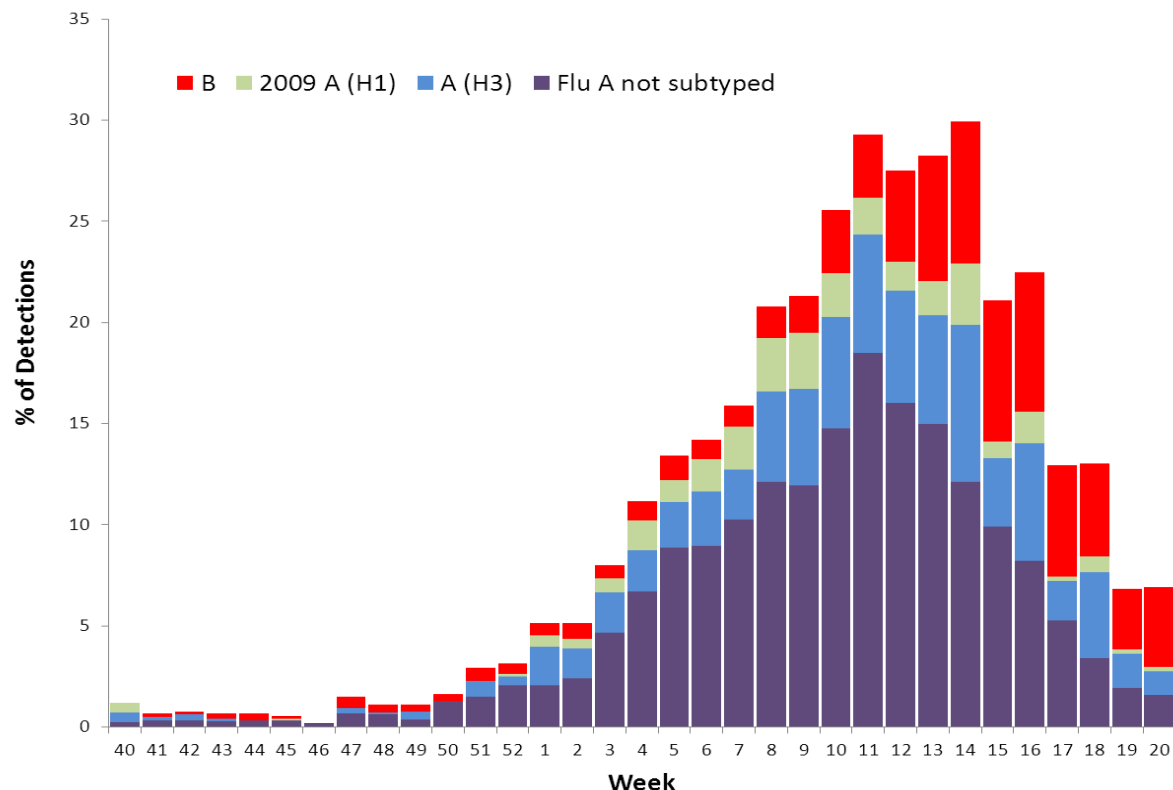
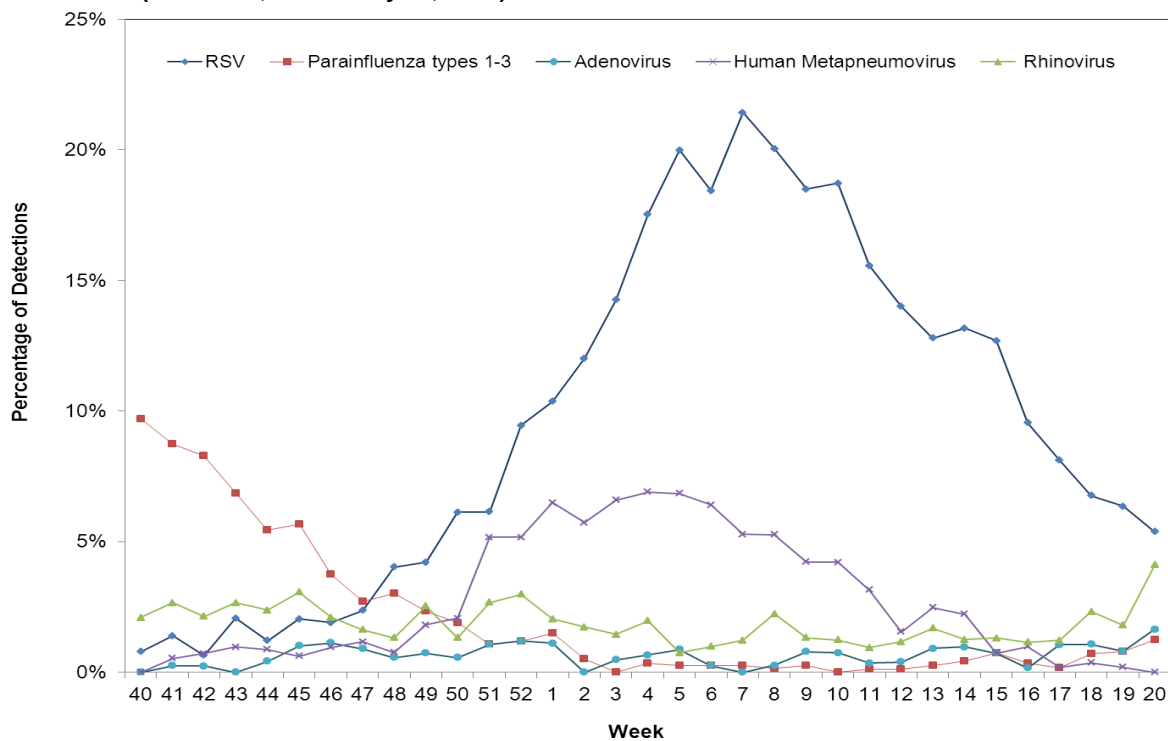


Figure 3. Percentage of Influenza Types and Subtypes in Respiratory Laboratory Network and Sentinel Laboratories, 2011–2012



The proportion of respiratory syncytial virus (RSV) detections decreased in week 20 (5.4%, compared to 6.4% in week 19) (Figure 4).

Figure 4. Other Respiratory Pathogen Detections in Respiratory Laboratory Network and Sentinel Laboratories, Weeks 40-20 (October 2, 2011 – May 19, 2012)



2. Antiviral Resistance Testing (AVR)

CDPH-VRDL has tested 140 influenza specimens for antiviral resistance to date during the 2011-2012 influenza season; all but one influenza A (2009 H1N1) have been sensitive to neuraminidase inhibitor drugs (Table 1).

Table 1. Number of Specimens Tested for Antiviral Resistance

| | Neuraminidase Inhibitors Resistance |
|--------------------------------|--|
| Influenza A (2009 H1N1) | 1/35 |
| Influenza A (H3N2) | 0/105 |

3. Influenza Virus Strain Characterization

Of the 103 California specimens that have been strain-typed to date during the 2011-2012 influenza season, all but eight influenza B matched with components of the 2011-2012 vaccine for the Northern Hemisphere (Table 2).

Table 2. Influenza Virus Antigenic Characterization for the 2011-12 Season

| | Total (N=103) |
|-----------------------------------|--------------------------|
| Influenza A | 82 |
| A/Perth/16/2009-like (H3N2)* | 52 |
| A/California/07/2009-like (H1N1)* | 30 |
| Influenza B | 21 |
| B/Brisbane/60/2008-like* | 13 |
| B/Wisconsin/01/2010-like | 8 |

*Matches components of the 2011-12 Northern Hemisphere influenza vaccine

C. Laboratory-confirmed Fatal Case Reports

CDPH received three reports of influenza-associated deaths among persons less than 65 years old in week 20; one was in a child under 4 years old and two were in adults in the 50-64 year age-group. The dates of death occurred in February and March 2012.

To date during the 2011-2012 influenza season, CDPH has received 39 reports of influenza-associated deaths among persons less than 65 years old; 7 were among children 0-17 years and 32 were among adults 18-64 years.

D. Influenza-associated Outbreaks

CDPH received three reports of laboratory-confirmed influenza outbreaks in week 20; two were in congregate living facilities that were associated with influenza A (H3) and A (no subtyping performed) and one was in a jail that was associated with influenza B. The outbreaks occurred in March and April 2012.

For questions regarding influenza surveillance and reporting in California, please email InfluenzaSurveillance@cdph.ca.gov. This account is monitored daily by several epidemiologists.

For more information regarding the different influenza surveillance data sources, please visit the CDPH Influenza Surveillance Program at <http://www.cdph.ca.gov/programs/dcdc/Pages/CaliforniaInfluenzaSurveillanceProject.aspx>.

To obtain additional information regarding influenza, please visit the CDPH influenza website at [http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza\(Flu\).aspx](http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza(Flu).aspx).

A copy of the case report form for reporting any laboratory-confirmed influenza case that was either admitted to the ICU or died can be downloaded from [http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza\(Flu\).aspx](http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza(Flu).aspx).